

Serial No. 09/965,769

Patent

tradename Pearlbond ®, e.g., Pearlbond ® 501 from Aries Technologies, a distributor of Merquinsa (see specification, page 6, line 16-18, examples). Accordingly, Applicants submit that the rejection of claims 1-29 under 35 U.S.C. 112, second paragraph is unwarranted and request that it be withdrawn.

II. Rejection of Claims 1-29 Under 35 U.S.C. 103 (a) over Heider in view of Brauer

Claims 1-29 are rejected under 35 U.S.C. 103 (a) as being unpatentable over US 6,136,136 to Heider (hereafter "Heider") in view of Brauer (hereafter "Brauer").

Heider discloses a moisture curable polyurethane hot melt adhesive that is formed from a polyester, a low molecular weight polypropylene glycol and a diisocyanate. Heider also discloses that the polyester component is a mixture of partially crystalline polyesters and amorphous polyesters.

Brauer discloses a composition for forming a urethane adhesive that includes a polyol, a thermoplastic polyurethane and an organic isocyanate compound.

Independent claim 1 is directed to a hot melt moisture cure polyurethane adhesive composition that includes at least one polyurethane prepolymer. The polyurethane prepolymer includes the reaction product of a polyol component and a polyisocyanate component. The polyol component includes (a) at least one amorphous polyester polyol comprising the reaction product of neopentyl glycol, hexanediol, and at least one of phthalic anhydride and phthalic acid; (b) at least one liquid polyester polyol having a viscosity of greater than about 10,000 cps at 80° C; (c) at least one crystalline polyester polyol having a melting point of from about 40° C to about 120 °C; and (d) at least one thermoplastic polyurethane.

Serial No. 09/965,769

Patent

Heider does not teach or suggest an amorphous polyester polyol that includes the reaction product of neopentyl glycol, hexanediol, and at least one of phthalic anhydride and phthalic acid. Heider discloses in the examples two specific amorphous copolyester--one includes a mixture of isophthalic acid, neopentyl glycol, ethylene glycol, adipic acid, phthalic acid, and 3-hydroxy-2,2-dimethylpropyl-3-hydroxy-2,2-dimethyl propanoate (col. 9, lines 20-24); and the other one includes a mixture of neopentyl glycol, ethylene glycol, adipic acid, and phthalic acid anhydride (col. 9, lines 29-31). The amorphous copolyesters of Heider are nothing like the claimed amorphous polyester polyol that includes the reaction product of neopentyl glycol, hexanediol, and at least one of phthalic anhydride and phthalic acid. In particular, none of the amorphous copolyesters of Heider include hexanediol in combination with neopentyl glycol and at least one of phthalic anhydride and phthalic acid. Brauer does not cure the deficiency of Heider. Brauer does not teach or suggest an amorphous polyester polyol that includes hexanediol in combination with neopentyl glycol and at least one of phthalic anhydride and phthalic acid, either. Moreover, there is nothing in Heider or Brauer that would direct the skilled artisan to employ an amorphous polyester polyol that includes the reaction product of neopentyl glycol, hexanediol, and at least one of phthalic anhydride and phthalic acid. Therefore, the proposed combination of Heider with Brauer fails to teach or suggest the invention of claim 1. At least for these reasons, claims 1-29 are patentable over Heider in view of Brauer. Accordingly, Applicants submit that the rejection of claims 1-29 under 35 U.S.C. 103(a) over Heider in view of Brauer is unwarranted and request that it be withdrawn.

Serial No. 09/965,769

Patent

II. Supplemental IDS

Applicants submit herewith a Supplemental IDS that includes a copy of the PCT International Search Report for the corresponding PCT international application and copies of two (2) cited references--US 5,869,593 to Helmcke et al and US 6,207,248 to Yang et al. The other two (2) cited references--US 4,889,915 to Brauer et al., which is cited by the outstanding Office Action, and US 6,221,978 B1 to Li et al, which has been submitted as IDS on September 27, 2002, --are already in the record.

Applicants submit that none of the cited references would negate the patentability of the subject invention. In particular, none of the cited references, either alone or in combination, disclose the claimed amorphous polyester polyol that includes the reaction product of neopentyl glycol, hexanediol, and at least one of phthalic anhydride and phthalic acid.

In view of all the forgoing, Applicants submit that claims pending in the application are in condition for allowance and action in accordance therewith is respectfully requested. In the event that claims are not allowed, Applicants specifically request a personal or telephonic interview if doing so would facilitate the prosecution of the application to allowance.

Respectfully submitted,

Date : 02/06/03

Bin Su
Bin Su, Reg. No. 51,309

H.B. FULLER COMPANY
Patent Department
1200 Willow Lake Blvd.
P.O. Box 64683
St. Paul, MN 55164-0683
Tel: (651) 236-5502
Fax: (651)236-5126